

Amendments to the Specification

Please replace the paragraph at page 6, lines 17-21 with the following amended version of that paragraph:

In a preferred embodiment, exchange rate quotes are captured on a round-the-clock (RTC) basis, by sampling (snapping) the data at regular intervals. Only those samples (snaps) that fall within a fix period are used to calculate a fixed spot rate; the other samples are used to monitor the behaviour of the market, so that anomalies which may impact the next fix can be identified and analysed ahead of time.

Please replace the paragraph at page 17, line 23 through page 18, line 2 with the following amended version of that paragraph:

In addition to an acquisition module 10 for capturing sets of USD-based quotes from various bank and other sources, a second module 40 captures quotes to the euro (EUR) for currencies where the euro defines the primary rates of publication. A third module 45 is further provided to gather a third data set comprising actual trading rates from online trading systems. The combined data sets are then processed by a validation module 50. Module 50 includes additional tests supplementary to and novel over the tests carried out in the existing system, as will be detailed later. The various quotes accessed by the system are continuously validated by module 50 at regular intervals throughout the day, between even outside the times of fixing. This allows for trends to be viewed for the currencies and additional analyses to be performed, if necessary. Also, continuous error-trapping provides a more reliable background against which to test the samples during the fixing interval itself, as is described in more detail below.

Please replace the paragraph at page 21, lines 11-23 to the following amended version of that paragraph:

During a fixing period the nominal time of fixing, the data gathered and filtered/validated are processed in a fixing process 100. The fixing times in this embodiment are on the hour, and the fixing period extends from one minute before to one minute after the nominal fixing time. Of course these parameters can be chosen to be otherwise. The fixing process comprises several component steps, to be described in more detail below. In summary, the validated data from step 90 undergoes a test stage 105 which performs calculations on the received exchange rate data to in order to arrive at a reliable fixed rate. Conversions between different base currencies can be implemented at 110. A final set of tests are performed at 115, and queries placed for the human operator at 125 to resolve. The operator can either accept or modify the calculated rates 115, whereupon ~~and~~ output files for fixed rates covering the chosen currencies are output at 120. In this embodiment these are quoted in four separate files against US dollars USD, euro EUR, Pounds sterling GBP and Japanese Yen JPY.

Please replace the paragraph at page 22, lines 5-9 with the following amended version of that paragraph:

The data capture component is designed to run continuously and independently of the all other components except the data storage component (database). It can be a completely separate process within the application, and in other embodiments can be a separate application altogether. Its only purpose is to acquire snaps of the quote and trade data, and to pass this data to the data storage component. It has no significant user interface.

Please replace the paragraph at page 23, lines 17-26 with the following amended version of that paragraph:

The new sample is considered valid only if all of the above criteria (a) to (f) are met. The thresholds and other parameters used in this process can be set and varied according to requirements. For example, tolerances can be set to give more or less strict limitations on how much a currency is allowed to vary from its last sampled rate, from earlier samples, and with respect to ~~others~~ other currencies. Based on experience of the markets, the managers of the apparatus can set these parameters for each specific currency so as to trap errors in individual samples sufficiently reliably, but without discarding too much valid data, and without requiring excessive manual intervention. The stored parameters in such cases can include instructions to waive certain of the criteria (a) to (f) of the validation steps carried out under step 90.

Please replace the paragraph at page 24, lines 15-23 with the following amended version of that paragraph:

If the sample N causing the “red alert” fails the test at 175 but agrees with the next sample N+1 (Y) 175, received at 190 from a different contributor ‘Y’, this is detected at 195 and status is ~~be~~ changed at 200 to “yellow alert”. When the status is “red alert” and the sample N+1 (Y) does not confirm the sample N, but does confirm (205) the rate prior to that (N-1 (X)), the sample N is again marked as an incorrect rate 210. The status of the later samples N+1 etc. is returned to “green” at 215. When the status of a rate is “red alert” and the next sample from contributor Y does not confirm the previous sample and does not confirm the sample before that (N-2), the rates will remain on “red alert”.

Please replace the paragraph at page 25, lines 15-20 with the following amended version of that paragraph:

All quote snaps can be stored in the QuoteSnap table, which will have the time:base:variable triplet as its key. A field within the table will identify the source of the snap (i.e. Reuters, bank page, etc.). The fields of this table can cover such attributes as the time the snap was taken, ~~The~~ the ISO codes for the base and variable currencies, the institution making the quote, and the status of the quote, as well as the bid and offer rates.

Please replace the paragraph at page 29, lines 19-20 with the following amended version of that paragraph:

Fixed spot rates are handled in a way similar to quotes. It follows that there can be only one fixed spot rate for a given pair of base & variable currencies at any one fix time.

Please replace the paragraph at page 31, lines 4-8 with the following amended version of that paragraph:

At the conversion stage at the end of this process ~~outline~~ outlined above, the EUR rates are first converted into USD, along with the calculated fixed spot rates. After all the rates have been converted into USD, the USD quotes are then compared against the rates converted from EUR into the USD quoted rates. Additionally, the mid trade rates are compared against the mid quotes.